

Modeling & Simulation Professionals Civilian Program 36 and Functional Area 57

July 2004

Why an M&S Career Program?

With limited resources, transformation, and technology advancements, Modeling and Simulation Professionals have evolved to become a critical enabler supporting DoD and Army programs across all domains. ---GEN Shinseki stated that the lack of trained and ready simulation personnel is an Army strategic shortfall.

QUESTION:

How can we continue to effectively utilize, develop, train, and sustain enough M&S professionals to meet these requirements?

. Establishing a new Career Program (CP) - 50 Meter Target

- Developing a new Job Series - 500 Meter Target***

Why is a M&S Career Program Important?

Currently there are no defined linkages between training, education, and modeling & simulation career paths....

However, a M&S Career Program can correct this.

***The development of the Civilian Program Simulation Operations Specialty must begin now and continue with concurrent & simultaneous development effort with the Simulation Operations Officer program.
--LTG Ellis, Army DCSOPS***

Establishment of CP36 will provide a systemic personnel program to produce and retain civilian M&S professionals for current and future M&S needs

Why Simulation is now so Important to the Army

- **The Army is increasingly reliant on M&S:**
 - Increased importance to training & analysis
 - Reduced cost/schedule/risk for materiel development
- **Our current situation:**
 - State-of-the-Art limits being pushed
 - “On the Job” Trained Workforce

Army Is Increasingly Reliant On M&S



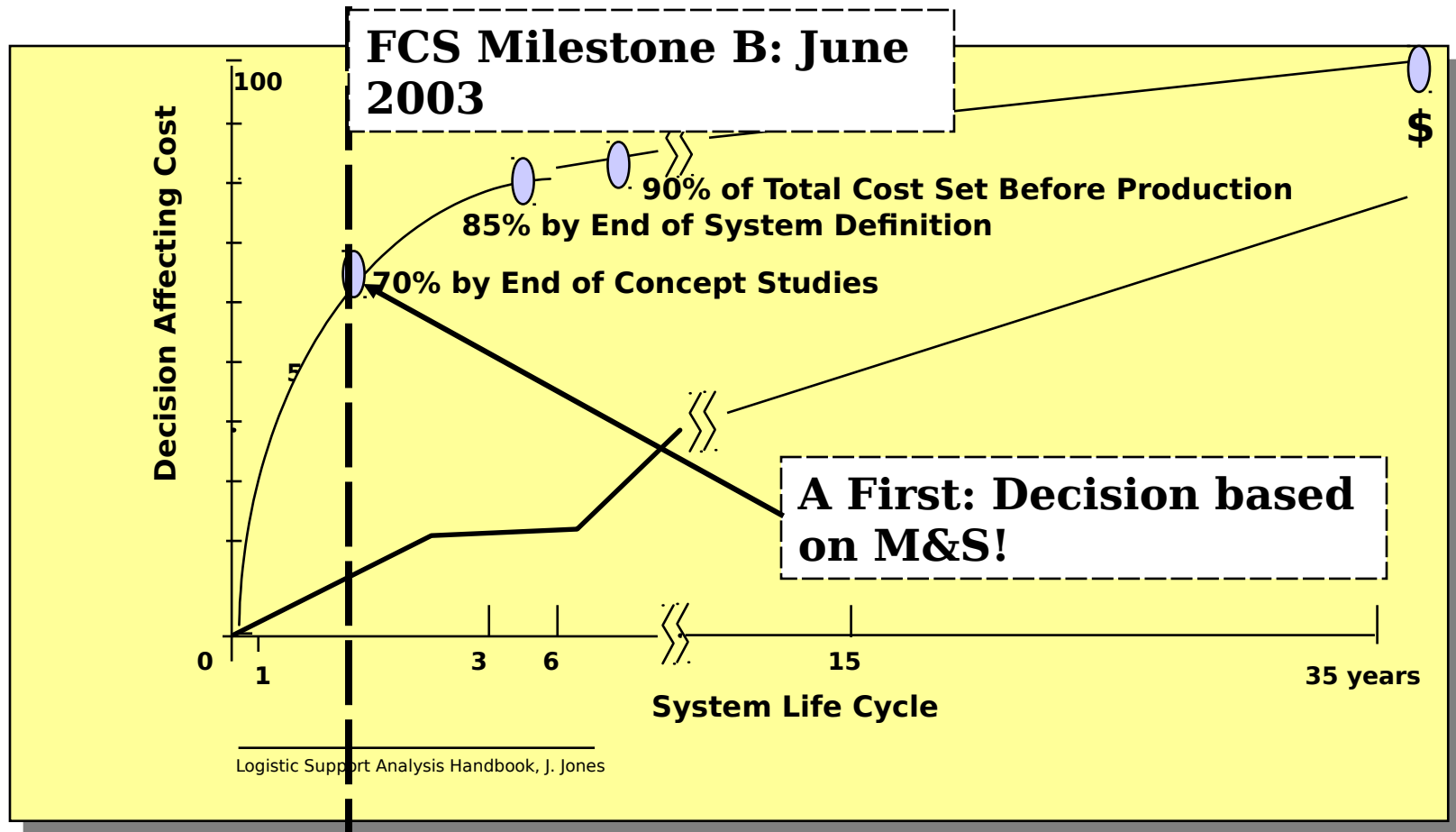
**Increased
importance to
training**

**Reduced
cost/schedule/risk for
materiel development**



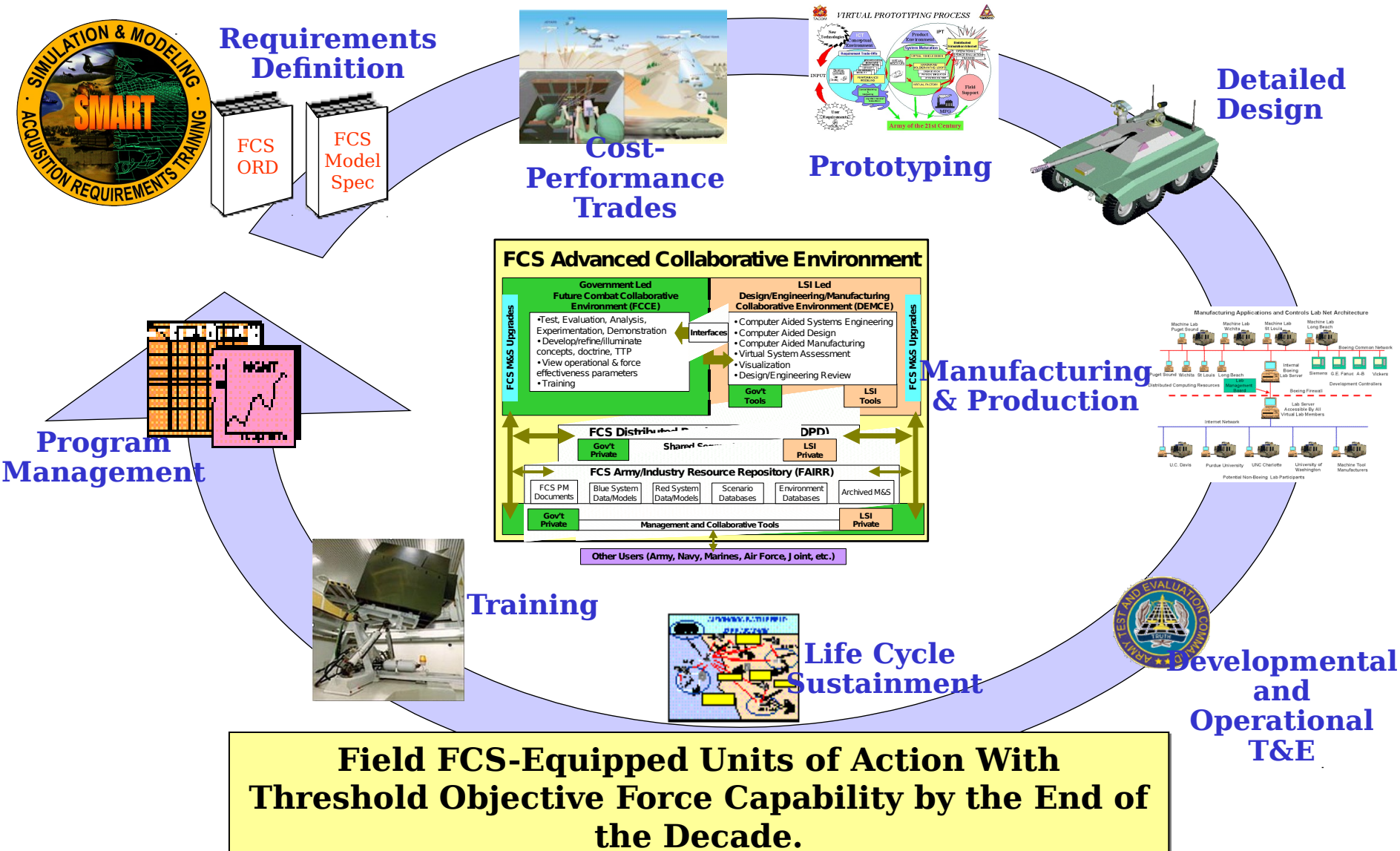
**A critical embedded component for COAA,
mission rehearsal, etc.**

During the Up Front Design and Development Process

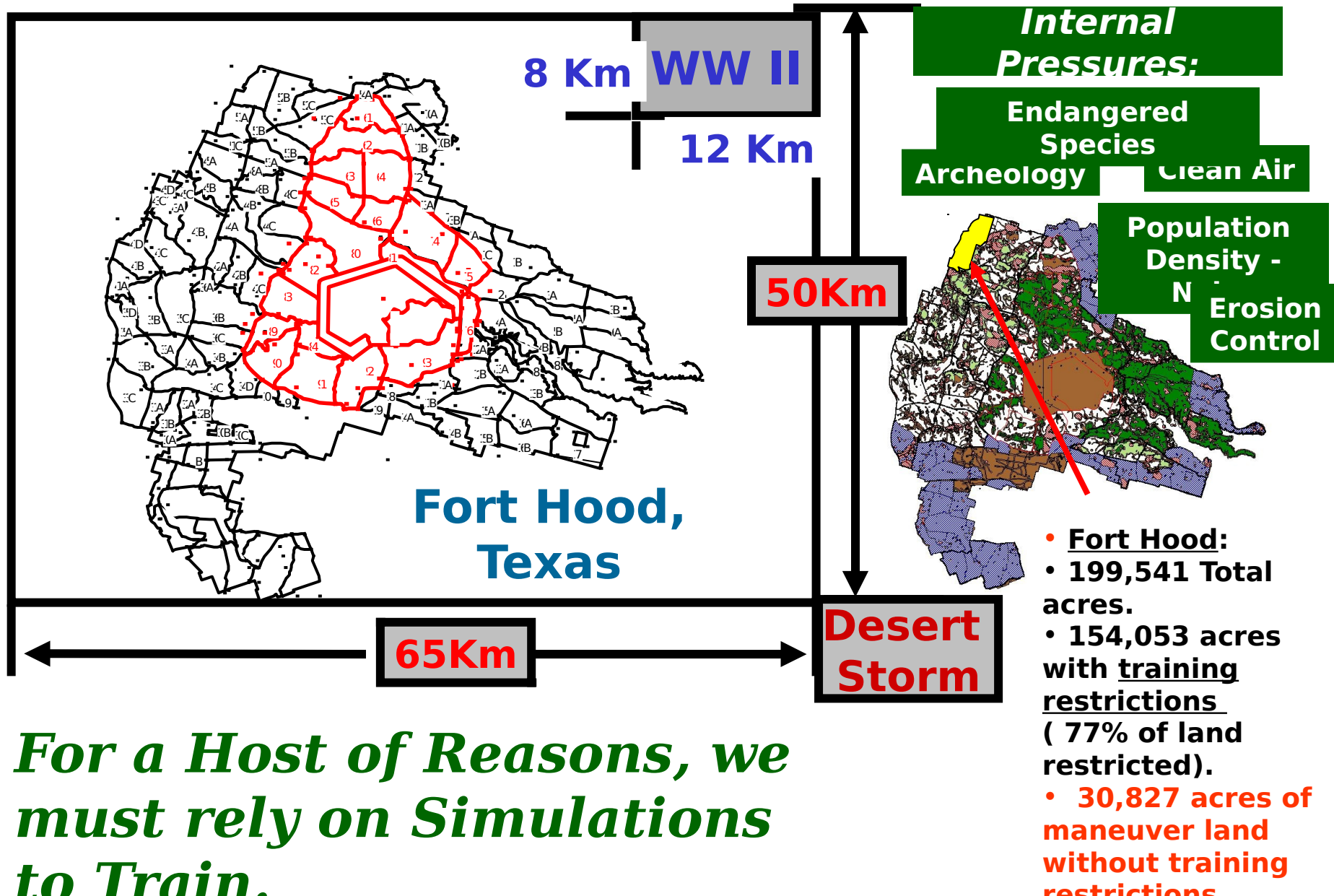


M&S Is a Critical Component To Army Transformation

The SMART Concept and FCS Thru the Life Cycle



The Evolving Battlefield



FA 57 SIMULATION **OPERATIONS**

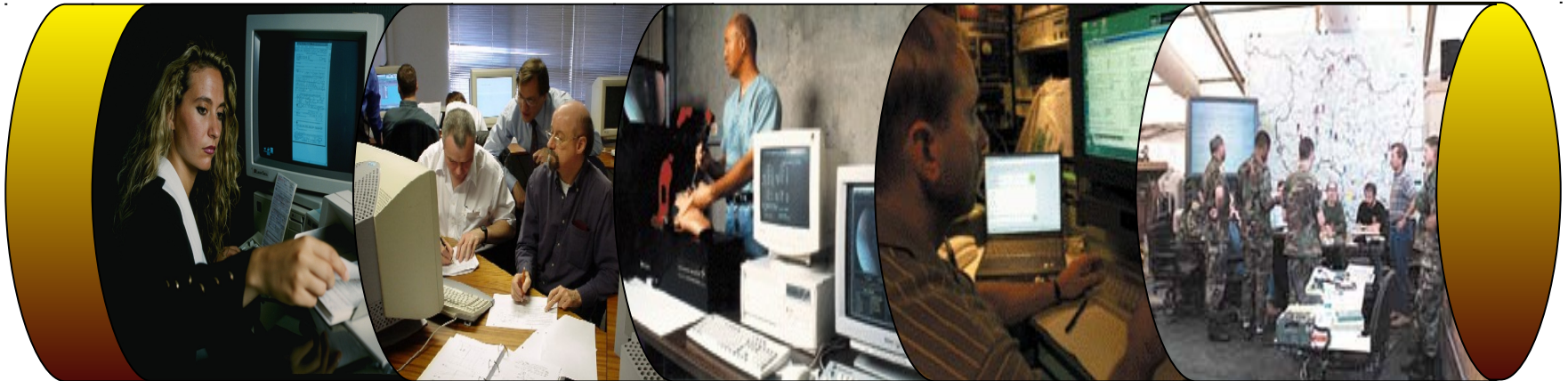
Warfighters – Soldiers first who understand military operations and training

Trainer – Experts who develop, plan ,coordinate and execute exercise at all levels of command: Army, Joint, Interagency and Multi-National

Simulationist – Operators who understand the capabilities of simulations and provide the environment for commanders to train, conduct mission rehearsal and mission planning

Army Simulation Operations Proponent Challenges

**Provide a quality M&S workforce to meet the
increasing demands of the Army's mission**



What will an Army Civilian M&S Professional look like?

- ***M&S focused*** and equipped with ***multi-disciplinary*** knowledge, skills, abilities, and experiences
- Trained & Educated in the M&S theory, models & tools
- Knows how the Army trains, acquires, and experiments
- Understands how to integrate M&S models and tools into training, acquisition, and experimentation
- Is a 'change agent' who infuses M&S throughout the Army today and tomorrow

Current DAC career experiences, job series, and Career Programs do not intentionally produce individuals with the breadth of knowledge, skills, and abilities for today and tomorrow's M&S Professional

Breadth of Modeling and Simulation

You will find modeling and/or simulation activity in every industry and kind of organization in the Federal Government.

Simulation has a unique core body of knowledge that has been identified and accepted by industry, academia, and government both nationally and internationally.

Academia has established **formal accredited M&S educational programs at all levels:**

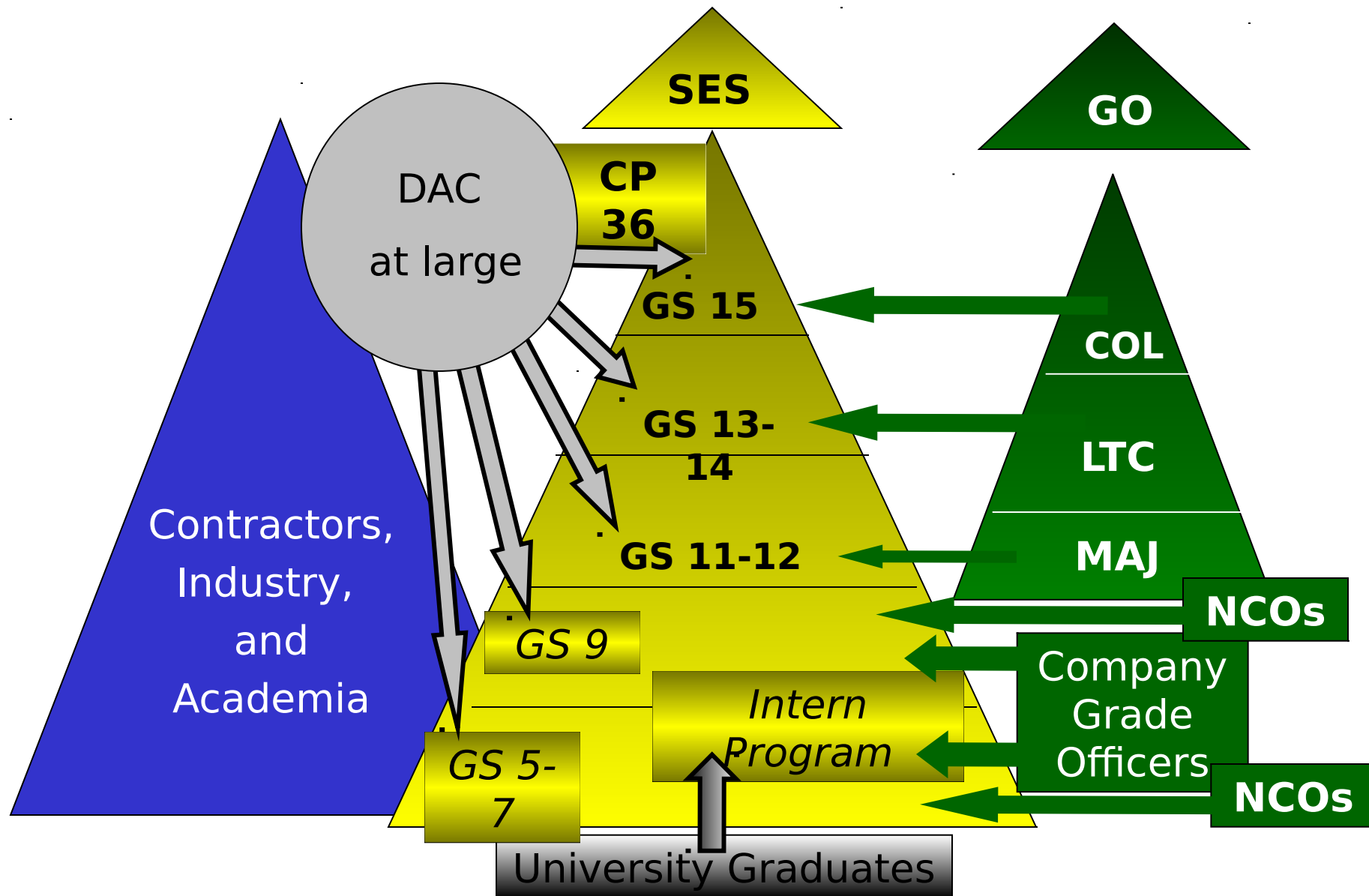
- **Associate Degree**
- **Bachelor Degree**
- **Master's Degree**
- **Doctorate Degree**

Simulation Operations Proponent Visits

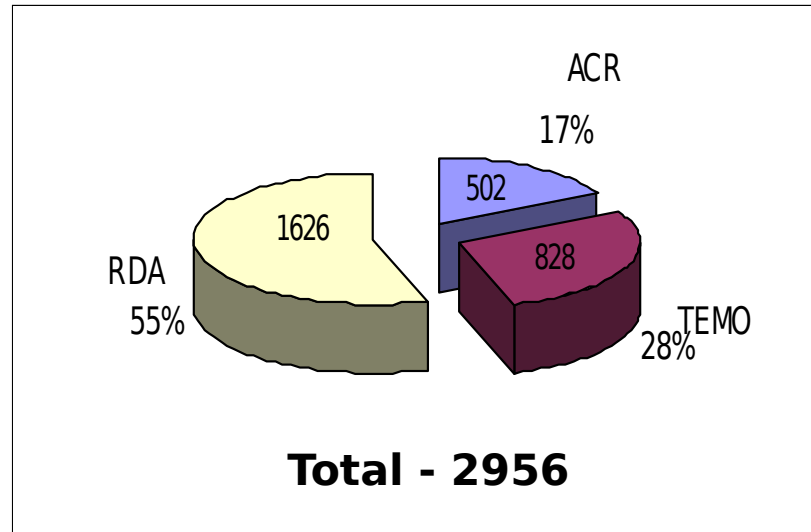
<u>Installation</u>	<u>Organization</u>
Ft. Belvoir, VA	CECOM - NVSD
Ft. Belvoir, VA	ERDC - TEC
Ft. Lee, VA	TRAC-Lee
Ft. Lee, VA	CASCOM
Ft. Lee, VA	NSC-Lee
Ft. Lee, VA	ALMC
Alexandria, VA	AMC
Ft. Bragg, NC	XVIII ABN Corps BSC
Ft. Bragg, NC	Special Ops BSC
Ft. Dix, NJ	78 th TSD BAC
Ft. McPherson, GA	FORSCOM G-3
Ft. McPherson, GA	3 rd Army, Roving Sands
Huntsville, AL	U.S. Army AMCOM
Huntsville, AL	U.S. Army SMDC
Huntsville, AL	PEO Aviation
Huntsville, AL	UAB in Huntsville
Huntsville, AL	PEO STRI, Training & Instrumentation CMD
Huntsville, AL	TMSO Redstone Technical Test Center

<u>Installation</u>	<u>Organization</u>
Ft. Hood, TX	III Corps BSC
Ft. Lewis, WA	1 Corps Warfighting Center
Ft. Irwin, CA	National Training Center
Yongsan, Korea	Korea Battle Sim Center
TDC, Korea	Warrior Training Center2ID
Osan, Korea	Korea Air Sim Center
Kaiserslautern, Germany	Warrior Preparation Center
Geratow, Germany	7 th Army Training CMD
Wurzburg, Germany	1 st ID, G-3
Wiesbaden, Germany	1 st AD, G-3
Ft. Leavenworth, KS	National Simulation Center
Orlando, FL	PEO STRI
Ft. Leavenworth, KS	TRAC-Leavenworth
Arlington, VA	Army Acquisition Corps
Ft. Monroe, VA	TRADOC HQs (G-3)
STEPR, Ft. Leavenworth	Ft. Stewart & Ft. Benning
STEPR, Ft. Leavenworth	3 rd Army, AMMED
STEPR, Ft. Leavenworth	Ft. Leonard Wood, MO
STEPR, Ft. Leavenworth	Ft. Wainwright, AK
STEPR, Ft. Leavenworth	Ft. Rucker, AL
STEPR, Ft. Leavenworth	Ft. Drum, NY & Ft. Sill, OK
STEPR, Ft. Leavenworth	DFC, Houston, TX
STEPR, Ft. Leavenworth	85 th BOC, Chicago, IL
STEPR, Ft. Leavenworth	Ft. Knox, KY, Ft. Riley, KS
DCS, G3 DAMO-TRL	DAAC Leader

Sources of DAC Simulation Professionals



Population



Estimated CP36 Population is 3,000

Source: FASCLASS Database

Common Job and Qualification Characteristics

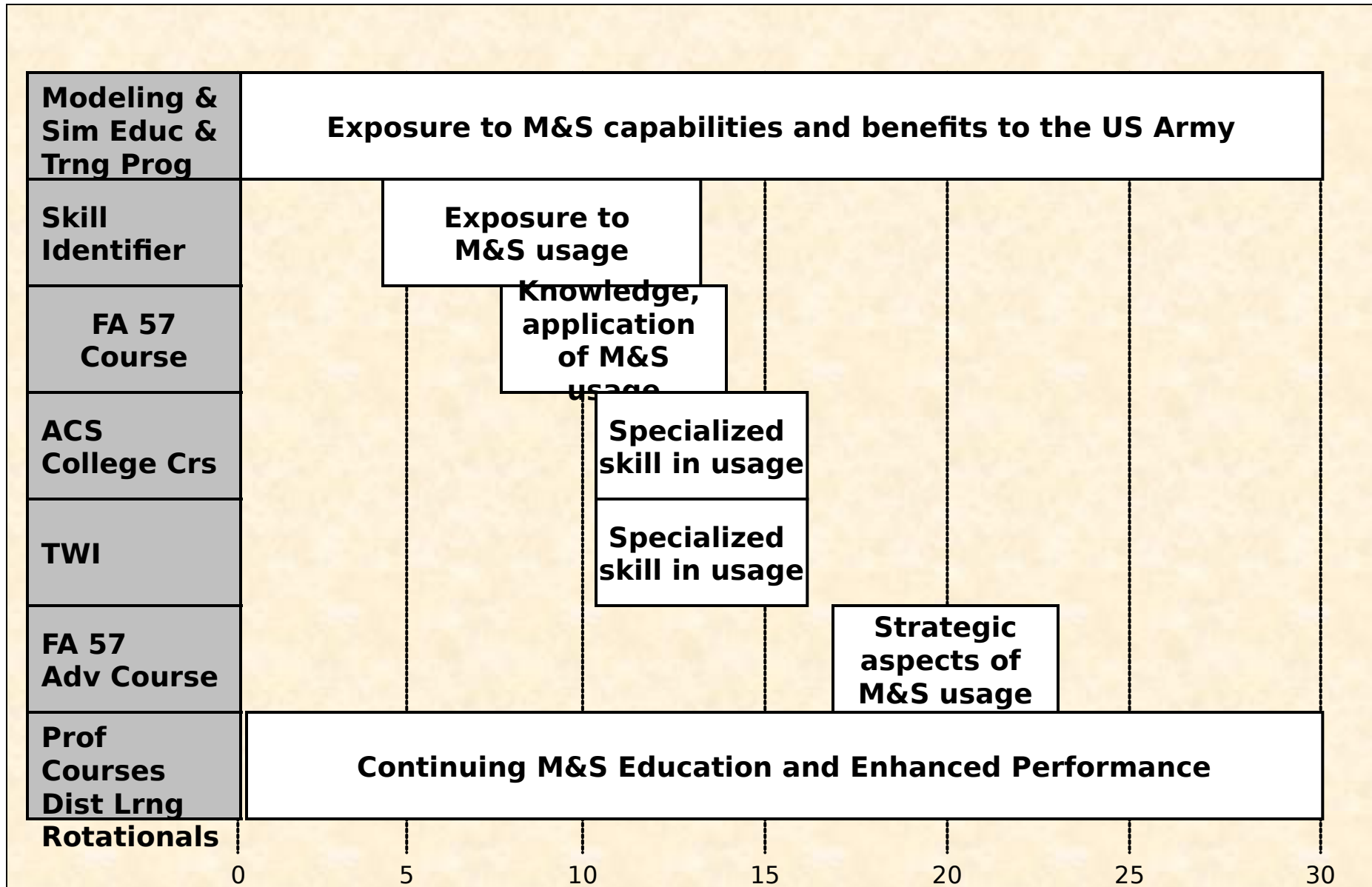
Common job and qualification characteristics include:

- (1) Fundamental knowledge of modeling and simulation
- (2) Creating models and simulations
- (3) Applying models and simulations
- (4) Integrating models and simulations
- (5) Evaluating and modifying models and simulations

Common job performance characteristics include:

- (1) Technical and expert advice on M&S capabilities in respective domain
- (2) Planning, preparing, supervising, executing M&S in respective domain
- (3) Management, development, acquisition, and maintenance of M&S

Skills & Abilities



Simulation Operations Professional Courses

Designed as three separate one week courses that are independent of each other.

Fundamentals of M&S Program Management

- M&S History
- Systems Theory
- Concepts
- Representation
- Domains
- Interoperability
- M&S Organizations
- Develop Sim Reqts
- Technical Process

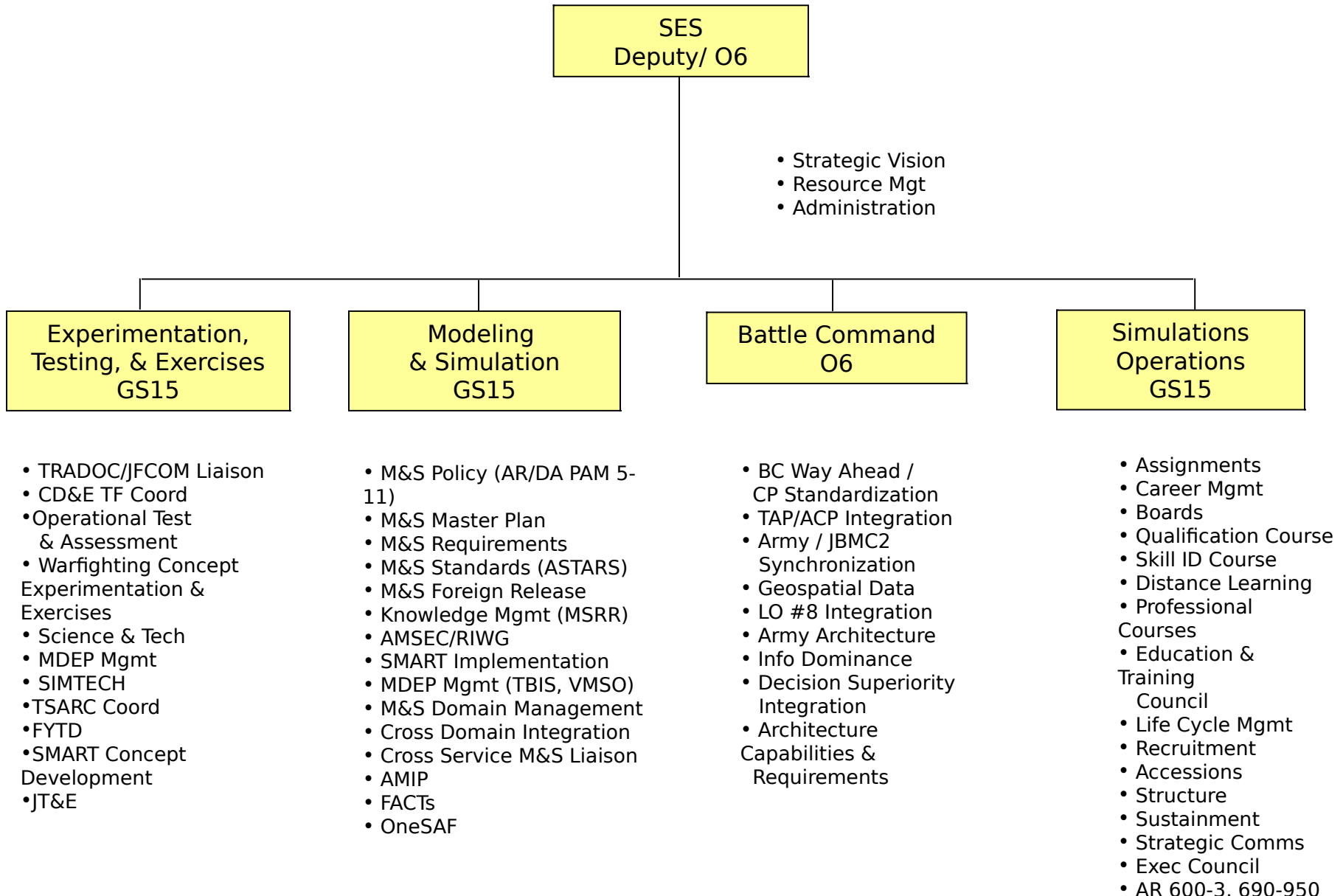
Technical Aspects of Simulations

- Locating M&S info
- Info on Sims (CBS, TACSIM, BBS, Spectrum, Janus, DBST, JCATS, CATT, ALSP)
- Training Objectives
- Communications
- AAR

Employing Simulations

- Pre-Integration
- Documentation
- Integration
- Analysis
- Design a Sim Evaluation
- Evaluate a Simulation
- Assessing Evaluation Data
- SMART

Battle Command, Simulation & Experimentation Dir



Simulation Operations Division

Division Chief & Proponent Manager
GS-15

Education and Training

Development Prog
Mgr
GS-14

Training Administrator
GS-13

Course Instructors*

CP 36 Program

Civilian Program
Manager
GS-14

Action Officer*

Life Cycle Management

Force Structure
Mgr
GS-13

Acquisition/
Sustainment
Manager
GS-13

Administrative
Officer*

FA 57 Program

Proponent Officer
O5/57A

Assignments
Officer
O4/57A
(Duty Station HRC)

*** Contractor**

Life Cycle Functions - FA 57

